

Pearls

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Preventing post-disaster PTSD: Watch for autonomic signs

Posttraumatic stress disorder (PTSD) is underdiagnosed among combat-exposed individuals and overdiagnosed among civilians. An expanded, nondichotomous checklist of emotional and physical signs following a disaster may help address this problem.

PTSD diagnostic criteria shortcomings

Schnurr et al calculated that DSM-IV-TR diagnostic criteria A1 and A2 for PTSD together have a 34% positive predictive value when applied to victims of violent crime.¹ Many who meet these criteria may not need intervention, and some interventions—such as critical incident stress debriefing—may be detrimental.^{2,3}

DSM-IV criteria A1 and A2 do not take into account common peritraumatic autonomic activation signs—shortness of breath, tremulousness, racing heart, and sweaty palms/cold sweat—that are part of the human hardwired acute response to

threat.⁴ Last year we published a research checklist of criteria A1 and A2 symptoms plus the four autonomic signs, which we collectively refer to as “criterion A3.”⁴

A preliminary (tentatively weighted) clinical version of this checklist, the PTSD Criterion A3 Checklist (*Table, page 43*), may be useful for screening persons in the acute aftermath of a disaster. While more research is needed, this version is:

Fear-specific. The checklist includes queries about two peritraumatic, fear-specific signs (tremulousness and sweaty palms/cold sweat) as well as peritraumatic tachycardia and dyspnea.

Brief. This tool takes as little as 2 minutes to administer, thus minimizing the burden on victims in the days or weeks after a mass disaster.

Non-dichotomous but easy to score. One point is scored for each “Yes” answer for 8 of the 10 queries; “Yes” answers to the two other queries are worth 4 and 3 points, respectively. A total score of 5 or more may indicate a need for preventive intervention such as propranolol, 40 mg tid or qid for 7 to 10 days.^{5,6}

Minimizes stigma. Assessing peritraumatic physical signs may help minimize stigma-related bias.⁴ This is important when screening persons likely to underreport criterion A2 symptoms, including:

- veterans
- military personnel
- firefighters
- police officers
- men in general
- persons from ethnic cultures in which having psychiatric symptoms is viewed as disgraceful.

Easy to remember. After a few administrations, the queries can be easily memorized and incorporated

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Table

PTSD Criterion A3 Checklist

Incident:		Total score* (0-15):	
Time since incident: _____			
At the time, did you...		Points for "Yes" answers	
Think... Criterion A1	That you would be seriously physically injured or killed?	4	Total A1 score:
	That a close family member would be seriously physically injured or killed?	3	
	That someone else would be killed?	1	
Feel... Criterion A2	Intense fear or fright?	1	Total A2 score:
	Helpless?	1	
	Horrified?	1	
Experience... Criterion A3 (Proposed for DSM-V)	Shortness of breath?	1	Total A3 score:
	Trembling, shaking or buckling knees?	1	
	Racing/pounding heart?	1	
	Sweaty palms or other cold sweat?	1	

• Consider preventive intervention (eg, propranolol regimen) if total score is 5 or more.

ed into initial assessments. The four acute autonomic activation signs can be remembered with the acronym "STRS" (shortness of breath, trembling, racing heart, sweaty palms). Consider "A3" a mnemonic for "acute autonomic activation."

References

1. Schnurr PP, Spiro A, Vielhauer MJ, et al. Trauma in the lives of older men: findings from the normative aging study. *J Clin Geropsychol* 2003;8:175-87.
2. Wessely S, Rose S, Bisson J. Brief psychological interventions ("debriefing") for trauma-related symptoms and the prevention of post traumatic stress disorder. *Cochrane Database Syst Rev* 2000;CD000560.
3. Bisson JI, Jenkins PL, Alexander J, Bannister C. Randomised controlled trial of psychological debriefing for victims of acute burn trauma. *Br J Psychiatry* 1997;171:78-81.
4. Bracha HS, Williams AE, Haynes SN, et al. The STRS (shortness

of breath, tremulousness, racing heart, and sweating): A brief checklist for acute distress with panic-like sympathetic indicators; development and factor structure. *Ann Gen Hosp Psychiatry* 2004;3:1-11. Available at: <http://www.annals-general-psychiatry.com/content/pdf/1475-2832-3-8.pdf>

5. Pitman RK, Sanders KM, Zusman RM, et al. Pilot study of secondary prevention of posttraumatic stress disorder with propranolol. *Biol Psychiatry* 2002;51:189-92.
6. Vaiva G, Ducrocq F, Jezequel K, et al. Immediate treatment with propranolol decreases posttraumatic stress disorder two months after trauma. *Biol Psychiatry* 2003;54:947-9.

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